REFERENCES

CHING, R. C. (1978): The Chinese Fern Families & Genera: Systematic arrangement and historical origin. *Acta Phytotax. Sin. 16*(8): 1-19.

FISCHER, C.E.C. (1938): Ferns of Lushai hills.

Rec. Bot. Surv. India 12: 152-161.

GAGE, A. T. (1899): A botanical tour in the South Lushai Hills. Rec. Bot. Surv. India. 1(12): 331-369.

30. A NEW TAXON OF THE RUBIACEAE FROM NORTH EAST INDIA

(With two text-figures)

In course of studies on taxonomic revision of Indian *Psychotria* L. (Rubiaceae) we examined several specimens which could not be placed under the known taxa and appeared to be distinct. The present paper is based on such a collection

Psychotria silhetensis Hook. f. Fl. Brit. Ind. 3:174. 1880 is based on a collection from Sylhet by De Silva which is extant in Wall. Cat. 8336C (K—W, Photo in CAL!). A specimen bearing the same number in CAL, however, does not represent this taxon.

In course of Abor Expedition, I. H. Burkill collected a specimen I. H. Burkill 35726 (CAL) in fruiting condition from Makum, Assam in Nov. 1911. He assigned it doubtfully to P. silhetensis. G. Panigrahi collected a similar specimen (G. Panigrahi 11251) in Nov. 1957 from Dulong Reserve Forest, Assam. This is also in similar fruiting condition and collected from a locality near the former one. These were provisionally considered to form a new variety of P. silhetensis.

While these studies were going on, the late K. M. Vaid of Forest Research Institute, Dehra Dun, sent several specimens to the senior author for determination, one of which K. N. Vaid and H. B. Naithani 156 represented this new taxon.

On further study of all the material of P. silhetensis and those of the new taxon and in

consideration of their distribution we assign these material to a new subspecies. Specimens available bear leaves with stipules, fruits with seeds and persistent calyx. This is described below.

Psychotria silhetensis Hook. f. subsp. tomentosa subsp. nov. (Fig. 1).

differt a *P. silhetensis* Hook. f. subsp. *silhetensis* foliis infra ferrugineo tomentosis, stipulis infra et secus marginem pubescentibus, fructibusque parvioribus ovoides.

This differs from *P. silhetensis* Hook. f. subsp. *silhetensis* in having leaves ferruginous tomentose beneath, stipules pubescent beneath and along the margin and smaller broadly ovoid fruit.

Shrubs 1.5 – 2 m high; branches stout, thick, quadrangular when young, terete in age, ferruginous tomentose. Leaves petiolate, 15 – 24 x 7 – 9 cm, elliptic or slightly ellipticobovate, shortly acuminate at the apex, entire, cuneate or obtuse at the base, coriaceous, glabrous above, densely ferruginous tomentose beneath; midrib stout beneath, less so above, lateral nerves 14 – 20 on each side, subparallel, arcuate, close, conspicuous beneath, less so above; axil of the midrib and lateral nerves imperforate; nervules reticulate conspicuous beneath, less so above; petioles 1 – 1.5 cm long, thick, tomentose; stipules deciduous, 1.5 – 2.5 x 0.6 – 0.7 cm, ovate, caudate-acu-

MISCELLANEOUS NOTES



Fig. 1. Psychotria silhetensis Hook. f. subsp. tomentosa subsp. nov. A. Habit; B. Fruit; C. Seed (dorsal view); D. Seed (ventral view); E. Embryo.

minate, coriaceous, glabrous above, pubescent beneath and along the margin. Inflorescence terminal or axillary, long peduncled cymes, $5 - 8 \times 2 - 8$ cm (when fruiting), branches irregular or dichotomous, short or spreading, stout, tomentose: bracteoles minute. Flowers not available. Fruits 0.5 - 0.6 x 0.3 - 0.45 cm, subglobose, crowned with calyx (lobes triangular, about 0.05 cm long, ciliate at the margin), glabrescent, shortly stalked; stalks 0.3 - 0.5 cm; pyrenes solitary, ovoid, planoconvex, acute at the apex, retuse at the base, smooth, thin walled. Seeds 0.4 - 0.5 x 0.3 -0.4 cm, ovoid, acute at the apex, retuse at the base, dorsally convex, smooth, with a longitudinal shallow groove on the ventral side; albumen uniform, thick; micropyle pointing upwards; cotyledons fleshy, oblong.

Type: Assam, North Lakhimpur, Makum, 21-11-1911, I. H. Burkill 35726 (Holotype in CAL). North Lakhimpur, Dulong Reserve Forest, 21-11-1957, G. Panigrahi 11251 (Paratype in CAL); Arunachal, Deomali, K. N. Vaid and H. B. Naithani 156 (Paratype in DD).

Distribution: Makum and Dulong Reserve Forest of North Lakhimpur district, Assam to Deomali Reserve Forest of Tirap district, Arunachal.

It is worthwhile to note the distribution of

BOTANICAL SURVEY OF INDIA, HOWRAH 711 103, (W.B.), February 26, 1982. the typical subspecies *P. silhetensis* Hook. f. subsp. *silhetensis* which is as follows. *Sylhet* (Bangladesh), Khasi Hills, North Cachar, Mizoram, Manipur, Nagaland, Sibsagar district and Dafla Hill of Arunachal Pradesh.

Distinct distribution of these two subspecies is clearly evident from the accompanying map (Fig. 2).

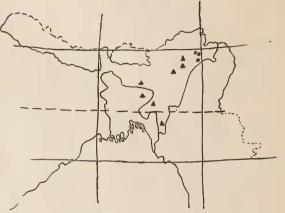


Fig. 2. Distribution of *Psychotria* silhetensis Hook. f. • P. silhetensis Hook. f. subsp. silhetensis.

P. silhetensis Hook. f. subsp. tomentosa.

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